CERTIFICATE OF MAILING

THEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED APR 2 4 2001

WITH THE UNITED STATES POSTAL SERVICE AS FIRST-CLASS MAILTH AN ENVELOPE ADDRESSED TO: ASSISTANT COMMISSIONER FOR PATENTS ENTER 1600/2900

WASHINGTON, D.C. 20231, ON APRIL 17, 2001

AGENT/ATTORNEY FOR APPLICANT

Docket No. 1134C

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Duvick, et al.

Date:

April 17, 2001

Serial No.:

09/771.045

Group Art Unit:

1633

Filed

January 26, 2001

Examiner:

For:

"Amino Polyol Amine Oxidase Polynucleotides and Related Polypeptides and

Methods of Use"

Assistant Commissioner for Patents Washington, D.C. 20231

TRANSMITTAL

Transmitted herewith are the following documents: Response to Notice to Comply; Substitute computer readable form (CFR) copy of the Sequence Listing; Substitute paper copy of Sequence Listing; and Statement to Support Filing and Submission in Accordance with 37 CFR §§1.821 through 1.825.

Although there should be no fees associated with the filing of these documents the Commissioner is hereby authorized to charge any processing fees associated with said documents, or to credit any overpayment, to Deposit Account 16-1852. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Kun Mu R

Karen Moon Bruce Agent for Applicant(s)

Registration No. 42,366

PIONEER HI-BRED INTERNATIONAL, INC.

Corporate Intellectual Property 7100 N.W. 62nd Avenue P.O. Box 1000

Johnston, Iowa 50131-1000

Phone: (515) 248-4879 Facsimile: (515) 334-6883





CERTIFICATE OF MAILING

RECEIVED I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED TO THE PROPERTY OF THE PROPERTY O WITH THE UNITED STATES POSTAL SERVICE AS FIRST-CLASS MAN, IN AMERICAN ENVELOPE ADDRESSED TO: ASSISTANT COMMISSIONER FOR PAFENTS.

WASHINGTON, D.C. 20231, ON APRIL 17, 2001

WASHINGTON, D.C. 20231, ON APRIL 17, 2001 WITH THE UNITED STATES POSTAL SERVICE AS FIRST-CLASS MAIL IN AN

AGENT/ATTORNEY FOR APPLICANT 7,2001

Docket No. 1134C

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Duvick, et al.

Date:

April 17, 2001

Serial No.:

09/771,045

Group Art Unit:

1633

Filed

January 26, 2001

Examiner:

For:

"Amino Polyol Amine Oxidase Polynucleotides and Related Polypeptides and

Methods of Use"

Assistant Commissioner for Patents Washington, D.C. 20231

RESPONSE TO NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

This letter is in response to the "Notice to Comply" mailed on March 29, 2001 which indicated that the copy of the "Sequence Listing" in computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823. A copy of "The Notice to Comply" is enclosed.

Enclosed please find a substitute computer readable form (CFR) copy of the "Sequence Listing", a substitute paper copy of the "Sequence Listing", and a statement that the content of the paper and computer readable copies are the same, and where applicable, include no new matter.

Although there should be no fees associated with this Response the Commissioner in the Commission of t

Respectfully submitted,

to Mr Bu

Karen Moon Bruce Agent for Applicant(s) Registration No. 42,366

PIONEER HI-BRED INTERNATIONAL, INC. Corporate Intellectual Property 7100 N.W. 62nd Avenue P.O. Box 1000 Johnston, Iowa 50131-1000

Phone: (515) 248-4879 Facsimile: (515) 334-6883



RECEIVED

APR 2 4 2001

UNITED EATER PATENT AND TRADEMARK OFFICE

APPLICATION NUMBER

FILING/RECEIPT DATE

FIRST NAMED APPLICANT

ATTORNEY DOCKET NUMBER

09/771,045

01/26/2001

Jonathan P. Duvick

1134C

CONFIRMATION NO. 7253

FORMALITIES LETTER

Pioneer Hi-Bred International, Inc. Corporate Intellectual Property 7100 N.W. 62nd Avenue P.O. Box 1000 Johnston, IA 50131-1000 *OC00000005917489*

Date Mailed: 03/29/2001

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given TWO MONTHS FROM THE DATE OF THIS NOTICE within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

• A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase Patentin Software, call (703) 306-2600
- For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

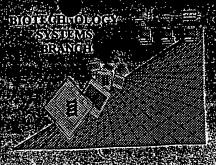
A copy of this notice <u>MUST</u> be returned with the reply.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY

RAW SEQUENCE LISTER DRIROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable

Application Serial Number:

Date Processed by STIC

BEST AVAILABLE COPY

THE ATTACKED PRINTOUT EXPLAINS DETECTED ERRORS

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

OWNCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE

APPLICANTAVITHA NOTICE TO COMPLY or,

TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRESUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERERETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216 PATENEUNIA Lempilhelp: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) NEENTERN 30 amailtheip: spatin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TORDDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSIONS: PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE SEE BELOW

Checker Version 3.0

The Checker Version (Capplication) sa state-of the art Windows based software program employing a logical and municular difference to check whether a sequence listing is an compliance with maintainteeniene tiles diedee Versions utworks mesentienes listings e generaled for the original version or \$7 (1973 O 1974) 1874 sereigny och her te 1990 mit miss) and the reversities non niew mits) etreityering te 1993 as wellers World likelts and Property Organization (WIPO) Standard ST 18.

Checken Version 16 agence the previous 1105 dying sergion of Charlest and is 128 goinglaine Checker alter a public used to the k sequence lightings in Conglige Realpille from (CRE) harner subditioning them to the United States Pitters and Vipoletically Office (USPTO). like of the less to the territoring the requester having is expected to reach at lower chared requester

Checker Arrains Main in divid harder from his CM 10 websits of the following address: www.uspin.green.geheaffices(pricechecter)



OIPE

DATE: 02/08/2001 SEQUENCE LISTING TIME: 12:14:08 PATENT APPLICATION: US/09/771,045

Input Set : A:\1134CSEQLIST.TXT

Output Set: N:\CRF3\02082001\I771045.raw

Does Not Comply Corrected Diskette Needec. 4 <110> APPLICANT: Duvick, Jonathan P. Gilliam, Jacob T. Maddox, Joyce R. 8 <120> TITLE OF INVENTION: Amino Polyol Amine Oxidase Polynucleotides and Related Polypeptides and Methods of Use 12 <130> FILE REFERENCE: 1134C C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/771,045 C--> 14 <141> CURRENT FILING DATE: 2001-01-26 14 <150> PRIOR APPLICATION NUMBER: US 60/092,936 15 <151> PRIOR FILING DATE: 1998-07-15 17 <150> PRIOR APPLICATION NUMBER: US 60/135,391 18 <151> PRIOR FILING DATE: 1999-05-21 20 <150> PRIOR APPLICATION NUMBER: US 09/352,159 21 <151> PRIOR FILING DATE: 1999-07-12 23 <156> PRIOR APPLICATION NUMBER: US 09/352,168 24 <151> PRIOR FILING DATE: 1999-07-12 26 <160> NUMBER OF SEQ ID NOS: 53 28 <170> SOFTWARE: FastSEQ for Windows Version 3.0 30 <210> SEQ ID NO: 1 31 <211> LENGTH: 372 32 <212> TYPE: DNA 33 <213> ORGANISM: Exophiala spinifera 35 <220> FEATURE: 36 <221> NAME/KEY: misc_feature 37 <222> LOCATION: (346)...(346) 38 <223> OTHER INFORMATION: n = A,T,C or G 40 <400> SEQUENCE: 1 41 gggeccegge gttetegtag getgegegga gttggtecca gacagaettt tgtegtaeet 42 gottggactg ttgggaccae ttcegteeeg qgteteegae catgaaacag gtaatggaee 120 43 attgtcgatc gacgtcgatg ctggtatctc tggcaaatga gatggggtca cagctcgatt 180 44 ggaggaegee egagaageet tgttegegee accaeggett gteecataeg aagaetatet 240 45 tgctatagta gcccaggata gaattttccg ccaatgcttg etteteggeg ggaagaggtg 300 wth 46 gtgaaaatgt caaggtggga tacaaggttg tcggtaacga aaccancacc tttttgcttc 360 47 ggaacacggc gc 372 49 <210> SEQ ID NO: 2 50 <211> LENGTH: 182 51 <212> TYPE: DNA 52 <213> ORGANISM: Exophiala spinifera 54 <400> SEQUENCE: 2 55 gaattttccg ccaatgcttg cttctcggcg ggaagaggtg gtgaaaatgt caaggtggga 60 56 tacaaggttg teggtaacga aaccaccace tttttgette ggaacaegge geeegaggee 120 57 gategtaetg tacageegga tgeegaetge teaattteag egaegggggt gttgaggtge 180 58 ac 182

60 <210> SEQ ID NO: 3 61 <211> LENGTH: 29 62 <212> TYPE: DNA

63 <213> ORGANISM: Artificial Sequence

Input Set : $A:\1134CSEQLIST.TXT$

Output Set: N:\CRF3\02082001\1771045.raw

65 66	<220> <223>	FEAT	TURE:	: NFORI	NATI(ON: I	Desi	gned	oli	gonu	cleot	tide	for	3' 1	RACE	, N21965	
	<pre><223> OTHER INFORMATION: Designed oligonucleotide for 3' RACE, N21965 <400> SEQUENCE: 3</pre>																
70	20									29							
		_		-			•										
	<210> SEQ ID NO: 4 <211> LENGTH: 28																
•	<211> DENGIR: 26 <212> TYPE: DNA																
					rtif	icia.	l Sec	gueno	ce								
	<213> ORGANISM: Artificial Sequence <220> FEATURE:																
78	<2237	ОТН	ER TI	VEORI	ሃ ልጥፐ()N: 1	Desid	ned	oli	gonu	cleot	tide	for	5' 1	RACE	, 21968	
	<pre><223> OTHER INFORMATION: Designed oligonucleotide for 5' RACE, 21968 <4400> SEQUENCE: 4</pre>																
81	70									28							
	3 <210> SEQ ID NO: 5																
	<211>																
	<212>																
	<213>				xoph:	iala	spi	nife	ra								
	<220>				iopii.		0										
	<221>				ns.												
	<222>		•			(13)	861										
	<400>				1)	. (± 5	00,										
93	gac	ישמני	7++ 0	 	rac (ata (ota o	ata d	ata .	aac	act o	aac	tta a	age (aat	ttq	48
94	Asp A	aac '	yuu y Vali	Mai	Acn 1	Val 1	Val 1	Val 1	Val (Glv.	Ala (Glv	Leu :	Ser (Ğĺv	Leu	
95	1	1311	var r	nia i	5	, u _				10		2			15		
97	gag a	200	aca (ימר :		rtc i	cea i	מכר (acc -		ata i	taa	tac (ata (att	ctt	96
98	Glu S	Thr	ala i	290 C	Lize 1	val (Gln i	Ala i	Ala i	Glv	Leu S	Ser	Cvs	Leu '	Val	Leu	
99	Giu	1111 /	114 2	20	<u> </u>		· · · ·		25	1			•	30			
101	man	aca	ato		cat	αta	aaa	aga		act	ctg	agc	qta	caa	tcg	ggt	144
102	. gag	Δla	Mot	Asn	Ara	Val	Glv	Glv	Lvs	Thr	Leu	Ser	va!	Gin	Ser	Gly	
102		AIU	35	nsp	111 9	,	017	40	-2-				4.5			-	
105		aac		acq	act	atc	aac		ctc	qqc	gct	gcg	tgg	atc	aat	gac	192
106	Pro	Glv	Ara	Thr	Thr	Ile	Asn	Asp	Leu	ĞÎy	Āla	Ala	Trp	Ile	Asn	Asp	
107		50	9				55	•		_		60	_				
109	age		caa	agc	αaa	ata	tcc	aga	ttg	ttt	gaa	aga	ttt	cat	ttg	gag	240
110	Ser	Asn	Gln	Ser	Glu	Val	Ser	Arq	Leu	Phe	Glu	Arg	Phe	His	Leu	Glu	
111			01			70					75	-				80	
113	ggc	gag	ctc	caq	agg	acq	act	qqa	aat	tca	atc	cat	caa	gca	caa	gac	288
114	Glv	Clu	Len	Gln	Ara	Thr	Thr	Glv	Asn	Ser	Ile	His	Gln	Ala	Gln	Asp	
115		0	Lou	02	85					90					95		
117		aca	acc	act		act.	cct	tat	aat	gac	tcc	ttg	ctg	age	gag	gag	336
118	gge.	Thr	Thr	Thr	Thr	Ala	Pro	Tvr	Glv	Asp	Ser	Leu	Leu	Ser	Ğlu	Glu	
119		****		100				- 4	105					110			
121	att	gca	agt	gca	ct.t	aca	gaa	ctc	ctc	ccc	gta	tgg	tct	cag	ctg	atc	384
122	Val	Ala	Ser	Ala	Leu	Ala	Glu	Leu	Leu	Pro	Val	Trp	Ser	Gln	Leu	Ile	
123			115					120			-	•	125				
125	Gaa	gag		age	ctt	саа	gac		aaa	qca	agc	cct	caq	gcq	aaq	cgg	432
126	Glu	Glu	His	Ser	Leu	Gln	Asp	Leu	Lys	Āla	Ser	Pro	Gln	Ālā	Lys	Arg	
127		130					135		2 -			140			-		
129	cto	gac	agt	ata	age	t.t.c		cac	tac	tqt	gag	aaq	gaa	cta	aac	ttg	430
130	I.en	Agn	Ser	Val	Ser	Phe	Ala	His	Tyr	Cys	Ğlu	Lys	Ğlu	Leu	Asn	Leu	
	a		001						4	•		•					

Input Set : A:\1134CSEQLIST.TXT
Output Set: N:\CRF3\02082001\1771045.raw

131 145 cet get gtt ete gge gta gea aac eag ate aca ege get etg ete ggt Pro Ala Val Leu Gly Val Ala Asn Gln Ile Thr Arg Ala Leu Leu Gly qtq qaa qcc cac gag atc agc atg ctt ttt ctc acc gac tac atc aag Val Glu Ala His Glu Ile Ser Met Leu Phe Leu Thr Asp Tyr Ile Lys 141 agt god acc ggt ctc agt aat att ttc tcg gac aag aaa gac ggc ggg Ser Ala Thr Gly Leu Ser Asn Ile Phe Ser Asp Lys Lys Asp Gly Gly 145 cag tat atg cga tgc aaa aca ggt atg cag tcg att tgc cat gcc atg 146 Gln Tyr Met Arg Cys Lys Thr Gly Met Gln Ser Ile Cys His Ala Met toa aag gaa ett gtt eea gge tea gtg eac etc aac acc eec gte get Ser Lys Glu Leu Val Pro Gly Ser Val His Leu Asn Thr Pro Val Ala gaa att gag cag teg gea tee gge tgt aca gta ega teg gee teg gge Glu Ile Glu Gln Ser Ala Ser Gly Cys Thr Val Arg Ser Ala Ser Gly gcc gtg ttc cga agc aaa aag gtg gtg gtt tcg tta ccg aca acc ttg 158 Ala Val Phe Arg Ser Lys Lys Val Val Ser Leu Pro Thr Thr Leu .159 tat coc acc ttg aca ttt toa coa cot ctt coc goo gag aag caa goa Tyr Pro Thr Leu Thr Phe Ser Pro Pro Leu Pro Ala Glu Lys Gln Ala 165. ttg gcg gaa aat tot ato ctg ggc tao tat ago aag ata gto tto gta Leu Ala Glu Asn Ser Ile Leu Gly Tyr Tyr Ser Lys Ile Val Phe Val tgg gac aag eeg tgg tgg ege gaa eaa gge tte teg gge gte ete eaa 170 Trp Asp Lys Fro Trp Trp Arg Glu Gln Gly Phe Ser Gly Val Leu Gln 173 tog ago tgt gao coo ato toa ttt goo aga gat aco ago ato gao gto Ser Ser Cys Asp Pro Ile Ser Phe Ala Arg Asp Thr Ser Ile Asp Val gat cga caa tgg tcc att acc tgt ttc atg gtc gga gac ccg gga cgg Asp Arg Gln Trp Ser Ile Thr Cys Phe Met Val Gly Asp Pro Gly Arg aag tgg tcc caa cag tcc aag cag gta cga caa aag tct gtc tgg gac Lys Trp Ser Gln Gln Ser Lys Gln Val Arg Gln Lys Ser Val Trp Asp 185 caa ete ege gea gee tae gag aac gee ggg gee caa gte eea gag eeg 186 Gln Leu Arg Ala Ala Tyr Glu Asn Ala Gly Ala Gln Val Pro Glu Pro gcc aac gtg ctc gaa atc gag tgg tcg aag cag cag tat ttc caa gga 190 Ala Asn Val Leu Glu Ile Glu Trp Ser Lys Gln Gln Tyr Phe Gln Gly 191 385 193 get eeg age gee gte tat ggg etg aac gat etc atc aca etg ggt teg 194 Ala Pro Ser Ala Val Tyr Gly Leu Asn Asp Leu Ile Thr Leu Gly Ser

Input Set : A:\1134CSEQLIST.TXT
Output Set: N:\CRF3\02082001\1771045.raw

gcg ctc aga acg ccg ttc aag agt gtt cat ttc gtt gga acg gag acg 198 Ala Leu Arg Thr Pro Phe Lys Ser Val His Phe Val Gly Thr Glu Thr tot tta gtt tgg aaa ggg tat atg gaa ggg gcc ata cga tcg ggt caa Ser Leu Val Trp Lys Gly Tyr Met Glu Gly Ala Ile Arg Ser Gly Gln ega ggt gct gca gaa gtt gtg gct age etg gtg eea gea gea 206 Arg Gly Ala Ala Glu Val Val Ala Ser Leu Val Pro Ala Ala 209 tag 211 <210> SEQ ID NO: 6 212 <211> LENGTH: 462 213 <212> TYPE: PRT 214 <213> ORGANISM: Exophiala spinifera 216 <400> SEQUENCE: 6 Asp Asn Val Ala Asp Val Val Val Cly Ala Gly Leu Ser Cly Leu Glu Thr Ala Arg Lys Val Gln Ala Ala Gly Leu Ser Cys Leu Val Leu Glu Ala Met Asp Arg Val Gly Gly Lys Thr Leu Ser Val Gln Ser Gly Pro Gly Arg Thr Thr Ile Asn Asp Leu Gly Ala Ala Trp Ile Asn Asp Ser Asn Gln Ser Glu Val Ser Arg Leu Phe Glu Arg Fhe His Leu Glu Gly Glu Leu Gln Arg Thr Thr Gly Asn Ser Iie His Gln Ala Gln Asp 8.5 Gly Thr Thr Thr Thr Ala Pro Tyr Gly Asp Ser Leu Leu Ser Glu Glu Val Ala Ser Ala Leu Ala Glu Leu Leu Pro Val Trp Ser Gln Leu Ile Glu Glu His Ser Leu Gln Asp Leu Lys Ala Ser Pro Gln Ala Lys Arg Leu Asp Ser Val Ser Phe Ala His Tyr Cys Glu Lys Glu Leu Asn Leu Pro Ala Val Leu Gly Val Ala Asn Gln Ile Thr Arg Ala Leu Leu Gly Val Glu Ala His Glu Ile Ser Met Leu Phe Leu Thr Asp Tyr Ile Lys Ser Ala Thr Gly Leu Ser Asn Ile Phe Ser Asp Lys Lys Asp Gly Gly Gln Tyr Met Arg Cys Lys Thr Gly Met Gln Ser Ile Cys His Ala Met Ser Lys Glu Leu Val Pro Gly Ser Val His Leu Asn Thr Pro Val Ala Glu Ile Glu Gln Ser Ala Ser Gly Cys Thr Val Arg Ser Ala Ser Gly Ala Val Phe Arg Ser Lys Lys Val Val Val Ser Leu Pro Thr Thr Leu

Input Set : A:\1134CSEQLIST.TXT
Output Set: N:\CRF3\02082001\1771045.raw

251		-	m l	-	-1	-1.		D	D	.	D	3 1 -	a 1	T	C1.		
251		Pro	275	ьeu	Thr	Pne	ser	280	Pro	Leu	PIO	Ald	285	гус	Gln	Ala	
252 253		a l a		λcn	Sar	т10	LOU		ጥተረጉ	Tur	Sar	Tue		Va 1	Phe	Val	
254	Leu	290	Giu	ASII	Ser	116	295	GIY	111	TYL	261	300	IIC.	VUI	i ne	Val	
255	Trn		Lvs	Pro	Tro	Tro		Glu	Gln	Gly	Phe		Glv	Va1	Leu	Gln	
256	305		<i></i> 1			310		414	01	011	315	001	0-1			320	
257		Ser	Cvs	Asp	Pro		Ser	Phe	Ala	Arg		Thr	Ser	Ile	Asp		
258		-		-1.01	325				••	330					335		
259	Asp	Arq	Gln	Trp	Ser	Ile	Thr	Cys	Phe	Met	Val	Gly	Asp	Pro	Gly	Arg	
260	-			340				-	345			-	_	350	_	_	
261	Lys	Trp	Ser	Gln	Gln	Ser	Lys	Gln	Val	Arg	Gln	Lys	Ser	Val	Trp	Asp	
262			355					360					365				
263	Gln	Leu	Arg	Ala	Ala	Tyr	Glu	Asn	Ala	Gly	Ala	Gln	Val	Pro	Glu	Pro	
264		370					375					380					
265	Ala	Asn	Val	Leu	Glu	Ile	Glu	Trp	Ser	Lys	Gln	Gln	Tyr	Phe	Gln	Gly	
266	385					390					395					400	
267	Ala	Pro	Ser	Ala	Val	Tyr	Gly	Leu	Asn	Asp	Leu	Ile	Thr	Leu	Gly	Ser	
263	*				405					410					415		
269	Ala	Leu	Arg		Pro	Phe	Lys	Ser		His	Phe	Val	Gly		Glu	Thr	
270				420					425		_	_		430			
271	Ser	Leu		Trp	Lys	Gly	Tyr		Glu	Gly	Ala	Ile	-	Ser	Gly	GIn	
272	_	٠,	435		a 1		1	440		. .	** - 1	5	445	n 1			
273	Arg	-	Ala	Ala	Glu	Vai		Ата	Ser	Leu	٧ā٠		Ala	Ата			
274	<210×	450	· тт	MO.	7		455					460					
	<210><211>			•													
	<212>				2.4												
	<21.3>				daoxii	niala	spi	inife	∍ra								
	<220>				. ج ت												
	<221>				DS												
	<222>					(64	16)										
	<221>						•										
286	<222>	LOC	ATIC	N: (647	(699)	1									
298	<221>	NAI	iE/KE	Y: 0	DS												
289	<222>	LOC	ATIC	N: (700)) (1439	9)									
291	<400>	SEC	UENC	E: 7	7	•											
292	-		-	-	-		-	-			-	-			ggt		48
293	-	Asn	Val	Ala	Asp	Val	Val	Val	Val	_	Ala	Gly	Leu	Ser	Gly	Leu	
294	1				5					10					15		
296		_	-	_		-	_	-	-		_		-		gtt		96
297	Glu	Thr	Ala		Lys	Vai	GIn	Ala		GTĀ	Leu	Ser	Cys		Val	Leu	
298				20			_		25	1-			_4_	30			1.1.4
300	gag	gcg	atg.	gat	cgt.	gta	ggg	gga	aag	act	ctg	agc	gta	Caa	tcg	ggt	144
301	GIU	нта		ASP	arg	val	GTÀ	40	тÃŖ	THE	цец	261	45	GTII	Ser	стЛ	
302 304	200	~~~	35	200	201	ato	220		ata	aac	act	aca		ato	aat	aac	192
304															aat Asn		132
305	£10	50	AI 9	TIIT	1111	176	55	vah	neu.	OT.	ala	60	1 - P	TTC	II	ų.s.p	
308	age	-	caa	age	aaa	ata		ада	tta	+++	gaa		+++	cat	ttg	gag	240
500	uyc	uuc	Juu	ayu	yuu	9		agu	9		344			Juc	9	2~2	2.30

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY DATE: 02/08/2001 PATENT APPLICATION: US/09/771,045 TIME: 12:14:09

Input Set : A:\1134CSEQLIST.TXT

Output Set: N:\CRF3\02082001\1771045.raw

```
L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:46 M:341 W: (46) "n" or "Xaa" used, for SEQ ID:1
L:349 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 7
L:1234 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:1234 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:1334 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:1335 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:1488 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:2095 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:2517 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:2989 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:2989 M:258 W: Mandatory Feature missing. <223> OTHER INFORMATION:
L:3153 M:259 W: Allowed number of lines exceeded, <223> Other Information:
7:3154 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:3487 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:3487 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:3810 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:3810 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:4185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 L:4247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40
```



	ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: U 7/1/1/, U 73
ATTA	: NEW RULES CASES: F	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1	Wrapped Nucleics	The number/text at the end of each line "wrapped" down to the next line.
		This may occur if your file was retrieved in a word processor after creating it.
		Please adjust your right margin to .3, as this will prevent "wrapping".
2	Wrapped Aminos	The amino acid number/text at the end of each line "wrapped" down to the next line.
	_ **rapped Arrillos	This may occur if your file was retrieved in a word processor after creating it.
		Please adjust your right margin to .3, as this will prevent "wrapping".
3	Incorrect Line Length	The rules require that a line not exceed 72 characters in length. This includes spaces.
4	Misaligned Amino Acid	The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
<u> </u>	Numbering	between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
5	Non-ASCII	This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
		Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
6	Variable Length	Sequence(s) contain n's or Xaa's which represented more than one residue.
		As per the rules, each n or Xaa can only represent a single residue.
		Please present the maximum number of each residue having variable length and
		indicate in the (ix) feature section that some may be missing.
7	Patentin ver. 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
	•	sequence(s) Normally, Patentin would automatically generate this section from the
		previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
		to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
		sections for Artificial or Unknown sequences.
8	Skipped Sequences	Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
	(OLD RULES)	(2) INFORMATION FOR SEQ ID NO:X:
		(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
		(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
		This sequence is intentionally skipped
		Please also adjust the "(iii) NUMBER OF SEOUENCES:" response to include the skipped sequence(s).
9	Skipped Sequences	Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
	(NEW RULES)	<210> sequence id number
		\$400> sequence id number
		000
0	Use of n's or Xaa's	Use of n's and/or Xaa's have been detected in the Sequence Listing.
	(NEW RULES)	Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
		In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
1	Use of <213>Organism	Sequence(s) are missing this mandatory field or its response.
1	(NEW RULES)	19 and more
2 J .	Use of <220>Feature	Sequence(s) are missing the <220>Feature and associated headings.
	(NEW RULES)	Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
		Please explain source of genetic material in <220> to <223> section.
		(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules
,	Datastla usa C.O. ***	Please do not use "Copy to Disk" function of Patentle version 2.6. This squees a corrected
·	Patentin ver. 2.0 "bug"	Please do not use "Copy to Disk" function of Patentin version 2.0. This causes a corrupted

Instead, please use "File Manager" or any other means to copy file to floppy disk.